

CLAIMS

1. A fiber-made surface fastener comprising joining faces in which a plurality of fiber-made engaging elements are provided on one surface of each flat base fabric, wherein a ratio (A/B) of an area A of a range in which sound spectrum of a peeling-off sound Fourier-transformed in a range of 100 Hz to 15000 Hz is 100 Hz to 3000 Hz to an area B of a range in which sound spectrum of a peeling-off sound Fourier-transformed in a range of 100 Hz to 15000 Hz is 3000 Hz to 15000 Hz is 0.4 or more.

2. A fiber-made surface fastener comprising joining faces in which a plurality of fiber-made engaging elements are provided on any one of front and rear surfaces of each flat base fabric, wherein a maximum component of sound spectrum of a peeling-off sound Fourier-transformed in a range of 100 Hz to 15000 Hz is a frequency lower than 3000 Hz.

3. A fiber-made surface fastener comprising joining faces in which a plurality of fiber-made engaging elements are provided on one surface of each flat base fabric, wherein a ratio (A/B) of an area A of a range in which sound spectrum of a peeling-off sound Fourier-transformed in a range of 100 Hz to 15000 Hz is 100 Hz to 3000 Hz to an area B of a range in which sound spectrum of a peeling-off sound Fourier-transformed in a range of 100 Hz to 15000 Hz is 3000 Hz to 15000 Hz is 0.4 or more and

a maximum component of sound spectrum of a peeling-off sound Fourier-transformed in a range of 100 Hz to 15000 Hz is a frequency lower than 3000 Hz.

4. The fiber-made surface fastener according to any one of claims 1 to 3, wherein a sum of bending strength of base fabrics of male and female surface fastener members is 36 gf·cm/2.5 cm or less when each base fabric is bent at 180° in a radius of 4.0 mm, and a joining face of at least one surface fastener member comprises a plurality of fiber-made engaging elements distributed uniformly on an entire surface.

5. The fiber-made surface fastener according to any one of claims 1 to 3, wherein an apparent density of the base fabric of each of fiber-made surface fastener members which engage each other is 0.5 g/cm³ or less and a joining face of at least one surface fastener member is composed of a plurality of fiber-made engaging elements distributed uniformly on an entire surface.

6. The fiber-made surface fastener according to claim 4 or 5, wherein the base fabric of the surface fastener has a weaving/knitting structure, and in case of the knitting structure, when a wale density and a course density are assumed to be N1 (number of wales/cm) and N2 (number of courses/cm) respectively and in case of the weaving structure, densities of warp yarns and weft yarns are assumed to be N1 (number of warp yarns/cm) and N2 (number of weft yarns/cm) respectively, a following equation (1) is satisfied:

$5.9 \leq N1 + N2 \leq 29$ (1)

7. The fiber-made surface fastener according to claim 5, wherein the base fabric of at least one of the fiber-made surface fastener members which engage each other has a multiple weaving/knitting structure produced by weaving or knitting in multiple layers via a binding yarn while a gap is provided between the respective layers and the apparent density of the base fabric of a remaining one of the surface fastener members is 0.5 g/cm^3 or less and

the one fiber-made surface fastener member having the multiple weaving/knitting structure comprises one or more layers whose apparent density is 0.5 g/cm^3 or less on a rear surface of a base layer from which the engaging elements are raised.

8. A surface fastener attached product provided with a surface fastener according to any one of claims 1 to 3, wherein the ratio (A/B) of the area A of the range in which the sound spectrum of the peeling-off sound of the surface fastener Fourier-transformed in the range of 100 Hz to 15000 Hz is 100 Hz to 3000 Hz to the area B of the range in which the sound spectrum of the peeling-off sound of the surface fastener Fourier-transformed in the range of 100 Hz to 15000 Hz is 3000 Hz to 15000 Hz is 0.4 or more.

9. The surface fastener attached product according to claim 8, further comprising gap forming means for forming a gap

between a rear face of a base fabric from which engaging elements of the surface fastener is raised and an attachment object.

10. The surface fastener attached product according to claim 8, further comprising vibration attenuating means provided between a rear face of a base fabric from which engaging elements of the surface fastener are raised and an attachment object.

11. The surface fastener attached product according to claim 10, wherein the vibration attenuating means is one of various kinds of fabrics whose bending strength is $0.7 \text{ gf}\cdot\text{cm}/2.5 \text{ cm}$ or less when the fabric is bent at 180° in a radius of 4 mm.

12. The surface fastener attached product according to claim 10, wherein the vibration attenuating means is one of various kinds of fabrics whose apparent density is 0.5 g/cm^3 or less.